

21(4)	INDEX I BOOK REPRODUCTION	807/2714
	International Conference on the Peaceful Uses of Atomic Energy. 2nd, Geneva, 1958	
	Reaching considerable heights; radioactive processes in reactor-type metals. (Report of Soviet Scientists; Nuclear Fuel and Reactor Metals) Moscow, Atomizdat, 1959. 670 p. (Series; No. 3, 6,000 copies printed.	
	2d. (Title page): A.A. Bakhov, Academician, A.P. Vinogradov, Academician, V.I. Kuznetsov, Corresponding Member, USSR Academy of Sciences, and A.P. Zaitsev, Director of Technical Sciences; Ed. (Inside book): V.I. Pavlovskiy and G.M. Pavlovskiy, Tech. Sci. Eds.	
	PREFACE: This volume is intended for scientists, engineers, physicists, and biologists working in the production and peaceful application of atomic energy; for professors and students of higher technical education where the subject is taught; and for people interested in atomic science and technology.	
	CONTENTS: This is volume 3 of a 3-volume set of reports on atomic energy, presented by Soviet scientists at the Second International Conference on the Peaceful Uses of Atomic Energy, held in Geneva from September 1 to 13, 1958. Volume 3 contains 2 parts. The first part, edited by A.I. Zubov, is devoted to general topics: preparation, construction and processing of nuclear source material; the second part, edited by G.I. Zverev, includes 27 reports on metallurgy, metallurgy, and nuclear technology of nuclear fuels and reactor metals, and nuclear irradiation. The title of the individual papers in most cases correspond word for word to the title of the official English language edition on the Conference proceedings. See 807/2081 for the title of the other volume of the set.	
	Authors: A.I. Zubov, G.I. Zverev, G.D. Glikberg, M.R. Glikberg, V.A. Glikberg, and M.B. Glikberg. Published by the USSR Academy of Sciences, Moscow, 1959. - In Russian Deposits of the Soviet Union (Report No. 2021) 110	
	Germanov, A.I., G.D. Glikberg, A.K. Glikberg, and V.I. Glikberg. - New Application of Uranium Distribution in Underground Waters (Report No. 2022) 124	
	New Data on Uranium Minerals in the USSR (Report No. 2066) 150	
	Gerasimov, A.G., E.Y. Gerasimov, A.I. Gerasimov, M.M. Gerasimov, E.A. Gerasimov, A.G. Gerasimov, and E.Y. Gerasimov. Some Theoretical and Methodical Problems of Radiometric Prospecting and Survey (Report No. 2505) 199	
	Belcherich, Ya.E. The Gamma-Ray Resonance Method for Determining Anomalous Isotopic Activity (Report No. 2284) 210	
	Korshak, G.A., and M.I. Korshak. Some Problems of Radiometric Uranium Ore Concentration (Report No. 2081) 227	

Card 8/11

WAKSMUNDZKI, A.; SOCZEWSKI, E.; SUPRYNOWICZ, Z.

On the relation between the composition of the mixed stationary phase and the retention time in gas-liquid partition chromatography.
Coll Cz Chem 27 no.8:2001-2006 Ag '62.

1. Department of Physical Chemistry, University Lublin, Poland.

SUPRANOVICH, P., inzh.

Head for the annular cut-out of large diameters and thicknesses.
Mash.Bel. no.6:205-206 '59. (MIRA 13:6)
(Drilling and boring machinery--Attachments)

SUPRANOVICH, T. I.

USSR/Physics of the Hydrosphere - Dynamics of Sea and Land Water, N-2

Abst Journal: Referat Zhur - Fizika, No 12, 1956, 36252

Author: Supranovich, T. I.

Institution: None

Title: Calculation of the Maximum Tide-Ebb Flows

Original

Periodical: Tr. Gos. okeanogr. in-ta, 1955, No 30, 221-225

Abstract: A method is proposed for calculating the maximum tide-ebb flow using equations proposed by N. P. Vladimirovskiy for the highest and lowest levels that are possible, depending on the astronomical causes. The initial data for such a calculation are taken to be the values of the harmonic constants of the maximum amplitude of the flow component. The characteristics of the maximum tide-ebb flow are calculated beforehand for the data obtained as a result of the computations. The secular and seasonal variations of the maximum tide-ebb flow are considered. A simplified computation method for the changes in the flow is proposed, based on

Card 1/2

Card 2/2

AUTHOR: Supranovich, T. I.

50-12-8/19

TITLE: The Graphic Operation of the Computation of the Harmonic Constants From Two Series of Observation Lasting 24 Hours (Graficheskiy priyem vychisleniya garmonicheskikh postoyannykh iz dvukh sutechnykh seriy nablyudeniya).

PERIODICAL: Meteorologiya i Gidrologiya, 1957, Nr 12, pp. 32 - 35 (USSR)

ABSTRACT: The work concerns the investigation of the tide. For the purpose of solution of a whole series of tasks connected with investigations of the tide, the methods of treatment of one and two series of observation lasting 24 hours are used. The determination of the harmonic constant of a wave, finally, comes to the computation of amplitude of oscillation Z , Y , and of the phases α , γ (table 1, pp. 34-35).

For each wave found out, the quantities Z , z are determined by astronomical and physical-geographical relations (conditions). The influence of the latter ones is expressed by the harmonic constants. The quantities Y , γ only depend on the astronomical data.

The astronomical arguments: B , b ; C , c ; and the components of the 12- and 24 hours values of the flow: F_2 , f_2 ; F_1 , f_1 serves as starting point for the computations of the data. The values

Card 1/3

The Graphic Operation of the Computation of the Harmonic
 Constants of the Series of Observation Lasting 24 Hours.

50-12-8/19

of astronomical arguments are taken from the tables: The corrections of the amplitude of oscillation B and of the phase b - according to the observation data, the corrections of the amplitude of oscillation C - each according to the moon parallax and the corrections of the phase c - each according to moments of culmination of the moon.

The amplitude of oscillation (F_2, F_1) and the phase (f_2, f_1) of the summary components of the flow easily can be determined by means of the mold proposed by A. I. Davanin; For this purpose it is sufficient to overlay the curve of the flow lasting 12 - or 24 hours on the mold with the course of the flow lasting 12- or 24 hours according to the real observations. The phase difference of these two curves represents the initial phase of the flow, the amplitude of oscillation, however, is computed as average between the maximum and minimum values of the flow. Furthermore the difference and relations of the initial data, which are denoted in table 1 (pp. 34-35) by x_k (or x^1, x^1), are to be determined. As result of the variation of the initial data one of the two main waves lasting 12- (or 24 -) hours will have the same characteristics, as well in the first 24 hours of observation, as in the second ones. One of the fluctuations then easily can be

Page 2/3

The Graphic Operation of the Computation of the Harmonic
 Constants From the Series of Observation Lasting 24 Hours.

5c-12-9/19

included, if the flow elements of the second 24 hours are sub-
 tracted from the flow elements of the first 24 hours, i. e. the
 differences are determined.

$$\left. \begin{aligned} Y \cos \gamma &= X_1 \cos x_1 - X_2 \cos x_2 \\ Y \sin \gamma &= X_1 \sin x_1 - X_2 \sin x_2 \end{aligned} \right\} \quad (1)$$

$$\left. \begin{aligned} Z \cos z &= X'_1 \cos x'_1 - X'_2 \cos x'_2 \\ Z \sin z &= X'_1 \sin x'_1 - X'_2 \sin x'_2 \end{aligned} \right\} \quad (2)$$

If the differences (1) and (2) are known, the characteristics
 Y , (z , Z) can be computed according to the following formulae:

$$\tan \gamma = \frac{Y \sin \gamma}{Y \cos \gamma} = \frac{X_1 \sin x_1 - X_2 \sin x_2}{X_1 \cos x_1 - X_2 \cos x_2} \quad (3)$$

$$Y = \frac{\sqrt{(Y \sin \gamma)^2 - (Y \cos \gamma)^2}}{\sqrt{(X_1 \sin x_1 - X_2 \sin x_2)^2 + (X_1 \cos x_1 - X_2 \cos x_2)^2}} \quad (4)$$

There are 1 table and 2 slide references.

AVAILABLE
 Jan 3, 5

Library of Congress

1. Oceanography 2. Water waves-Harmonics 3. Astronomy-Effects

3(9)

AUTHOR:

Supranovich, T. I.

SOV/50-59-7-9/20

TITLE:

From the Experience in the Analysis of Short-termed Observations of Tide Phenomena (Iz opyta analiza kratkosrochnykh nablyudeniy nad prilivnymi yavleniyami)

PERIODICAL:

Meteorologiya i gidrologiya, 1959, Nr 7, pp 36-37 (USSR)

ABSTRACT:

The practice of joint evaluation of some daily observations of tides shows that a harmonic analysis offers the most reliable results for those tide waves which are biggest in size. To determine the harmonic constants by this method, at least 3-4 series of daily measurements are carried out in each point. The observations at different times are carried out under different astronomic conditions. Therefore, a group of such observations may also contain some with small amplitudes. As a rule, the harmonic amplitudes corresponding to the latter are unreliable, especially with not large components. In analyzing the curves distorted by observation errors, these components can be separated much worse than the other components. For these reasons, one of the two principal half-day (or day) waves shows nearly equal dimensions, while the dimensions of the

Card 1/3

From the Experience in the Analysis of
Short-termed Observations of Tide Phenomena

SOV/50-59-7-9/20

other, not so distinctly marked, wave must be determined more precisely, or cannot be averaged at all due to a considerable divergence.- A method is pointed out here which was applied to such cases and has always improved the result. The "helmsman" method of the tide analysis expresses the half-day (or day) variations in form of two summands, formula (1). The tide variations caused by a principal wave (here S_2) or by a component related to it can be expressed by formula (2). It is assumed that in evaluating the observations the results for this wave are heterogeneous. Then, the variations caused by this wave can be separated from each day series, and the harmonic constants can be determined by the most reliable variations. Formula (6) is derived for the required harmonic constants. The amplitudes and phases of the other components (both of the wave height and of the currents) are computed in a similar way. 4 solutions for the waves of the half-day period, and 2 solutions for the waves of the day-period, are obtained for each series of observations. The ordinates and points of time necessary for the computation are taken from the wave-course diagram. The practice shows that usually those

Card 2/3

From the Experience in the Analysis of
Short-termed Observations of Tide Phenomena

SOV/50-59-7-9/20

observations where the required wave is not distinctly marked show a spread in the values of the harmonic constants. The results of the analysis of reliable curves are nearly equal and permit the mean values of the constants to be obtained. Finally, the computation of the amplitudes and phases of a wave is explained by an example. There are 1 figure and 1 table.

Card 3/3

SOSINA, S.M.; PASHKOVSKAYA, M.T.; Prinimani uchastiye: SUPRANOVICH, V.A.,
mladshiy nauch. sotrudnik; NOVIK, V.G., mladshiy nauch. sotrudnik;
TSYGANKOVA, R.I., tekhnik-tekhnolog

Methods for the disinfection of molasses for the production of baker's
yeast. Trudy BNIIPPT no.4:113-126 '61. (MIRA 17:10)

L 6000-65

REGISTRATION NR: AP5008022

serologic groups B (51.1%) or D (29%) with S. typhimurium (61.6%) dominant in group B and S. typhimurium (92.3%) dominant in group D. Sensitivity of the 156 salmonella strains to bioglycin, streptomycin, and levofloxacin was determined. The salmonella were least sensitive to bioglycin (19.9%), more sensitive to streptomycin (57%) and most sensitive to levofloxacin (88.4%). Orig. art. has: Mono.

ASSOCIATION: Sanitarно-epidemiologicheskaya stantsiya Kuybyshevskogo Rayona Moskvy (Sanitation and Epidemiological Station of the Kuybyshev Region of Moscow)

SUBMITTED: 03Jan84

INCL: 00

SUB CORR: 12

RE REP GOV: 000

OTHER: 000

2/2 1/83

SHIL'KO, M.I.; VAYLICH, V.I.; ZOBENINA, T.P.; CHERKEZ, F.K.; SHASHKAYA, G.N.;
STEPANOV, A.I.

Characterization of salmonella isolated in Kuybyshev District of
Moscow in 1961-1962. *Sov. mikrobiol., epid. i immu.* 42 no.3:143
No. 185. (MIRA 18:6)

I. Sanitaro-epidemiologicheskaya stantsiya Kuybyshevskogo rayona
Moskvy.

SUPRAT, Gh.

"Study of the economic history of Rumania," Vol.I. Reviewed by Gh.Suprat.
Probleme econ 15 no.1:146-152 Ja '62.

SUPRENENKO, M.

Dawn of the new world. Nauka i zhyttia 12 no.11:2 of cover, 1-3
N '62. (MIRA 16:1)

1. Chlen-korrespondent AN UkrSSR, predsedatel' Nauchnogo soveta
pri prezidiume AN UkrSSR po kompleksnoy probleme "Pobeda Velikoy
Okt'yabr'skoy sotsialisticheskoy revolyutsii i vosstanovleniye
Sovetskoy vlasti na Ukraine (1917-1920 gg.)".
(Ukraine--History)

STASHCHUK, M.F.; SUPRICHOV, V.A.

Mineralogy of loess deposits of the Sivash Valley. Mat.z min.
Ukr. no.2:79-91 '61. (MIRA 15:8)
(Sivash region--Loess)

L 22360-66 EWT(1)/T SCTB DD/N

ACC NR: AP6005103 (A) SOURCE CODE: UR/0325/65/000/004/0189/0192

AUTHOR: Suprin, T. P.

ORG: none

34

33

B

TITLE: Stimulating effect of fungi⁶ extracts on *Scenedesmus obliquus* chlorella

SOURCE: Nauchnyye doklady vysshey shkoly. Biologicheskiye nauki, no. 4, 1965, 189-192

TOPIC TAGS: chlorella, plant growth, fungus

ABSTRACT: The effects of extracts prepared from imperfecti fungi (*Fusella olivacea* strain 5 c, *Stemplylium* sp. strain 1936, *Helminthosporium* sp. strain 146, *Fusarium sambucinum* strain 1297, *Trichoderma* sp. strain 6/9, and *Trichoderum* sp. strain 2074) on the growth of 10 to 15 day old *Scenedesmus obliquus* cultures were investigated in agar and liquid nutritive media. Growth of the cultures was determined 2 days after the addition of different extracts (1:10 to 1:10,000) by cell counts of experimental and control cultures. On the 3rd day culture suspensions were mixed by blowing air and drops were placed under a microscope (400 X) to determine the number of cells in at

Card 1/2

L 22360-66

ACC NR: AP6005103

least 3 fields of vision. Then the arithmetic mean was determined for experimental and control cultures. Most of the tested extracts were found to display a marked growth stimulator effect with concentrations of 1:100 and 1:000 and an inhibiting effect with a concentration of 1:10. It should be noted that not all the fungi extracts acted as growth stimulators and in some cases batches of extracts prepared from the same producer displayed different effects. Extracts of Helminthosporium and Stemphylium (batches 60 to 90) displayed only an inhibiting effect, even with a 1:1000 concentration. The most active growth stimulator properties were displayed by the Fusella olivacea extracts. Three of the 10 Fusella olivacea extracts tested stimulated growth by more than 300% and 6 of these displayed a stimulating effect even with a concentration of 1:10,000; 5 of these extracts produced an inhibiting effect with a concentration of 1:10. Action differences of the various imperfecti fungi extracts on the growth of Scenedesmus obliquus cultures is explained as follows. Each extract appears to contain at least two substances. One substance displays an inhibiting effect with high concentrations, covering the stimulating effect of the other substance. The latter displays a stimulating effect with low concentrations covering the inhibiting effect. The display of only inhibiting or stimulating action by an extract is attributed to the formation of only one substance. Orig. art. has: 3 tables.

SUB CODE: 06/ SUBM DATE: 15Jul64/ ORIG REF: 002/ OTH REF: 005

Card 2/2^{da}

SUPRON, L.F.; ZVEREV, F.P.; MUKHIN, A.P., prof., red.; POL'SKIY, S.,
red.; STEPANOVA, N., tekhn.red.

[Medical care of the population subjected to methods of mass
destruction] Meditsinskoe obespechenie naseleniia v usloviakh
primeneniia sredstv massovogo porazheniia. Pod red. A.P.Mukhina.
Minsk, Gos.izd-vo BSSR. Red.nauchno-tekhn.lit-ry, 1959. 407 p.
(MIRA 12:9)

(ATOMIC MEDICINE)

SUPRON, L.F., dots., otv. red.; ARINCHIN, N.I., prof., red.;
GEL'BERG, S.I., prof., red.; KLEPATSKIY, B.I., prof., red.;
LIBERZON, G.Ya., prof., red.; NOVIKOV, I.I., kand. med.nauk
red.; RAZUMOVICH, A.N., assistant, red.

[Abstracts of the reports of the Fourth Scientific Session
on the Problem: Physiology, Morphology and Pathology of the
Cardiovascular System] Tezisy dokladov Nauchnoi sessii po
probleme: Fiziologiya, morfologiya i patologiya serdechno-
sosudistoi sistemy. Grodno, Grodnenskiy med. in-t, 1962. 207 p.
(MIRA 17:10)

1. Nauchnaya sessiya po probleme: Fiziologiya, morfologiya i
patologiya serdechno-sosudistoy sistemy, 4th, 1962. 2. Zave-
duyushchiy kafedroy patologicheskoy fiziologii Grodenskogo me-
ditsinskogo instituta (for Supron). 3. Zaveduyushchiy kafedroy
normal'noy fiziologii Grodenskogo meditsinskogo instituta (for
Arinchin). 4. Kafedra normal'noy anatomii Grodenskogo meditsin-
skogo instituta (for Novikov). 5. Zaveduyushchiy kafedroy mikro-
biologii Grodenskogo meditsinskogo instituta (for Gel'berg).
6. Zaveduyushchiy kafedroy obshchey khirurgii Grodenskogo medi-
tsinskogo instituta (for Klepatskiy). 7. Zaveduyushchiy kafed-
roy nervnykh bolezney Grodenskogo meditsinskogo instituta (for
Liberzon). 8. Kafedra biokhimii Grodenskogo meditsinskogo in-
stituta (for Razumovich).

W. J. WILK, Warsaw

Organism reaction of a child after intracutaneous BCG vaccination. Polish.
Dokl. 12 no. 5:587-606 May 67.

1. Z Zakładu Mikrobiologii Instytutu Matki i Dziecka w Warszawie
Dyrektor Instytutu; prof. dr med Fr. Groer. Kierownik Zakładu; prof.
dr med. I. Nleck. Adres: Warszawa, ul. Kasprzaka 17 Instytut Matki
i Dziecka.

(BCG) VACCINATION, inj. eff.

inflam., specific & non-specific, in child. (Pol))

INFLAMMATION, in inf. & child

specific & non-specific, after BCG vacc. (Pol))

MARYNOWSKA, Hanna; SUPRONOWICZ, Edward

Tuberculin provocation of leukergy and erythrocyte sedimentation rate in tuberculosis in children. Gruzlica 27 no.10: 1005-1017
0 '59.

1. Z Kliniki Gruzlicy Dzieciecej Instytutu Matki i Dziecka. Kie-
rownik: prof.dr. H. Marynowska.

(LEUKOCYTES)
(TUBERCULIN REACTION)

MARYNOWSKA, Hanna; SUPRONOWICZ, Edward

Double and single reaction tuberculin allergometry in connection with tuberculin leukergic tests in tuberculous children. *Pediat. polska* 36 no.3:229-239 '61.

1. Z Kliniki Gruzlicy Dzieci Instytutu Matki i Dziecka w Warszawie
Kierownik Kliniki: prof. dr med. H. Marynowska Dyrektor Instytutu:
prof. dr med. F. Groer.

(TUBERCULIN REACTION in inf & child)

SUPRONOWICZ, Rwa

General results of psychoprophylactic method in painless labor.
Gin. polska 27 no.6:785-789 Nov-Dec 56.

1. Z Kliniki Położnictwa i Chorob Kobięcych P.A.M. w Szczecinie
Kier. prof. dr. T. Zwolinski, i III Kliniki Położnictwa i Chorob
Kobięcych A.M. w Warszawie Kier. doc. dr. J. Lesinski.
(LABOR

painless, psychoprophylactic method (Pol))

FROLOVA, N.I.; CHERKES, F.K.; VAYNTRAUB, E.A.; VORONINA, T.P.; MONASZON, R.I.;
SPASSKAYA, Z.N.; SUPRONYUK, A.K.

Authors' abstracts. Zhur.mikrobiol., epid. i immun. 42 no.2:141
F '65. (MIRA 18:6)

1. Sanitarno-epidemiologicheskaya stantsiya Kuybyshevskogo
rayona Moskvyy.

1. The first part of the document is a list of names and titles of the members of the committee. The names are: Mr. J. Edgar Hoover, Mr. A. L. Smith, Mr. J. C. ... (10/1/57)

SUPRONYUK, K.S.

Change in the color and the degree of pyritization of Permian rocks as a petroleum-prospecting index in the Dnieper-Donets Lowland. Neft. i gaz. prom. no.2:16-19 Ap-Je '64.

(MIRA 17:9)

KORENEVSKIY, S.M.; SUPRONYUK, K.S.

Isolation of the Kramatorsk series and the stratification of its
potassium-bearing horizons in the western part of the Dnieper-
Donets Lowland. Dokl. AN SSSR 165 no.5:1143-1146 D '65.
(MIRA 19:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologicheskii institut
i Trест "Chernigovneftegazrazvedka". Submitted April 27, 1965.

L-07H08-67 EWT(1) IJP(2) GD/AT
ACC NR: AT6020574 (N)

SOURCE CODE: UR/0000/65/000/000/0126/0133

AUTHOR: Sukhomlin, Ye. A.; Supruchenko, V. A.; Reva, N. I.; Tolok, V. T.

62

B+1

ORG: none

TITLE: Dissipation of plasma oscillations excited in a current-carrying plasma

SOURCE: AN UkrSSR. Vysokochastotnyye svoystva plazmy (High frequency properties of plasma). Kiev, Naukovo dumka, 1965, 126-133

TOPIC TAGS: plasma heating, plasma oscillation, plasma conductivity, plasma containment

ABSTRACT: The heating and containment of plasma in a strong magnetic field in the presence of instabilities caused by "run-away" electrons is investigated. The experiment consists of a 100 ka linear discharge in hydrogen, characterized by the absence of gross hydrodynamic instabilities. The "run-away" current was monitored to study the onset of two-stream instability and the resultant thermalization of the plasma. In the absence of collisions the anomalous diffusion observed is attributed to an increase in the kinetic pressure of electrons in the center of the discharge. This effect was used to estimate the electron temperature from the time of arrival of the expanding plasma at the tube wall. The heating time, measured by observation of the emitted x-radiation and intense microwave bursts, is much shorter than that which can

Cord 1/2

L 07468-57

ACC NR: AT6020574

be explained by collisional heating. The very high final temperature of the electrons (2 kev) and short heating time correspond to the postulated collective process of heating by a two-stream instability. Orig. art. has: 4 figures.

SUB CODE: 20/ SUBM DATE: 19Nov65/ ORIG REF: 008/ OTH REF: 005

Card 2/2 *la*

MARINA, I., prokuror (Irkutsk); SALEY, A.; KISELEV, P., dispatcher;
KOVESHNIKOV, P. (Rostovskaya obl., Belokalitvinskiy rayon);
BORGUL', A.; SUPRUN, A. (Khar'kov); MUSAYEV, A.

Readers suggest, advise and criticize. Sov. profsoiuzy 19
no.13:36-37 J1 '63. (MIRA 16:9)

1. Chlen fabrichnogo komiteta Grodnenskogo tonkosukonnogo kombinata (for Saley).
 2. Makeyevskiy koksokhimicheskiy zavod (for Kiselev).
 3. Predsedatel' rabocheho komiteta Vedenovskogo sovkhoza, Kokchetavskaya obl. (for Borgul').
 4. Vagonnoye depó stantsii Kirovabad Azerbaydzhanskoy zheleznoy dorogi (for Musayev).
- (Trade unions)

SUPRUN, Aleksandr Makarovich

[An income of 40,000 rubles from a hectare of hemp] 40,000 rublei
dokhoda s gektora posevov konopli. [Moskva, Ministerstvo sel'skogo
khoziaistva SSSR, 1955. (MLRA 9:12)
(Hemp)

SUPRON, A.K., inzh.

Effect of wear on the lowering of the power indices of suction
dredges. Mekh. stroi. 20 no.9:12-13 S '63. (MIRA 16:10)

(Dredging machinery)

CLASS: 65
 AUTHOR: Suprun, A. N.
 TITLE: Device for calculating a solid cylindrical shaft for twisting. Class 42, No. 166521
 SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 4, 1965, 83
 TOPIC TAGS: shaft, torsion meter (1)

ABSTRACT: This Author Certificate presents a device for calculating a solid cylindrical shaft for twisting, containing a conformal mapping device, recording device, and multiplication units. To increase the calculation rate with accuracy sufficient in practice, to simplify the circuit and design, and to decrease the preliminary calculation for specifying the geometric parameters of the shaft cross section, the device contains a set of units whose inputs are connected to the output of the conformal mapping device. The output of the adjustment unit is connected to the multiplication units. The device also contains other units whose outputs are connected through another set of operational amplifiers to

Card 1/2

L 34832-65

ACCESSION NR: AP5007463

the recording device. The inputs of the divider units are connected through a third set of identical operational amplifiers to the outputs of the multiplication units.

ASSOCIATION: none

SUBMITTED: 07Oct63

ENCL: 00

SUB CODE: AS, IE

NO REF SOV: 000

OTHER: 000

Card 2/2

SUPRUN, A. P.

SUPRUN, A. P.: "Investigation of the simultaneous polycondensation of benzol and of the halide derivative of benzol with dichloroethane." Acad Sci USSR. Inst of Organoelemental Compounds. Moscow, 1956.

(Dissertation for the Degree of Candidate in Chemical Sciences.)

SO: Knizhnaya Letopis', No. 26, 1956

Handwritten: 1/17

AUTHORS: Kolesnikov, G. S., Korshak, V. V. 62-58-4-16/32
Suprun, A. P.

TITLE: Synthesis of Polyarylene Alkyls (Sintez poliarilena-
kilov). Communication 4. Temperature Influence on
the Course of the **Copolycondensation** of Benzene
and Chlorobenzene with Dichloroethane (Sobshcheniye
4. Vliyaniye temperatury na techeniye sovmestnoy poli-
kondensatsii benzola i khlorbenzola s dikhloretanom)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Otdeleniye Khimicheskikh
Nauk, 1958, Nr 4, pp. 492-494 (USSR,

ABSTRACT: Until now mainly the influence of the mixture of initial
substances on the properties of the forming polyconden-
sation products has been investigated. It was assumed
that the compositions of the copolymer and the mixture
of initial substances was identical. This is, however,
only correct when a certain polycondensation equilibrium
exists. When this equilibrium does not exist the initial
substances can be made use of only insufficiently. This
again leads to the formation of copolymers as could be

Card 1/3

Synthesis of Polyarylene Alkyls. Communication 4
Temperature Influence on the Course of the
Copolycondensation of Benzene and Chlorobenzene with
Dichloroethane

62-58-4-16/32

observed in the copolymerization of vinyl compounds. Then such copolymers form, the composition of which is subject to changes during polycondensation. Until now the process of common polymerization has not been investigated to such an extent that the reason for these changes of the forming copolymers could be explained. In the present paper the authors report on the carried out investigation of the influence of the reaction temperature on the course of the common polycondensation of 1,2-dichloroethane with benzene and chlorobenzene in the presence of aluminum chloride. It was shown that with increasing prolongation of the reaction also the content of chlorine in the polymer increases. From this is to be concluded that the activity of benzene and chlorobenzene in the interaction with chloroethane is different. Furthermore an equation was suggested which connects the yield in copolymers with the temperature and the duration of reaction.

There are 5 figures, 5 tables and 6 references, 2 of which are Soviet.

Card 2/3

Synthesis of Polyarylene Alkyls. Communication 4.
Temperature Influence on the Course of the
Copolycondensation of Benzene and Chlorobenzene with
Dichloroethane

62-58-4-16/32

ASSOCIATION: Institut elementoorganicheskikh soyedineniy Akademii
nauk SSSR (Institute for **Elemental-organic** Compounds,
AS USSR)

SUBMITTED: November 1, 1956

AVAILABLE: Library of Congress

1. Vinyl compounds—Copolymerization

Card 3/3

62-58-5-11/27

AUTHORS: Kolesnikov, G. S., Korshak, V. V., Suprun, A. P.

TITLE: Synthesis of the Polyarylenalkyles (Sintez poliarilenalkilov)
Communication 5: The Influence of the Concentration of the
Catalyst on the Course of Common Polycondensation of Benzene
and Chlorobenzene With 1,2-Dichloroethane (Soobshcheniye 5.
Vliyaniye kontsentratsii katalizatora na techeniye protsessa
sovmestnoy polikondensatsii benzola i khlorbenzola s 1,2-dikhloro-
etanom)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Otdeleniye Khimicheskikh Nauk,
1958, Nr 5, pp. 600 - 604 (USSR)

ABSTRACT: In the preceding report the authors reported on the results
of investigation of the influence of temperature of the reaction
on the course of the process of common polycondensation of
benzene and chlorobenzene with dichloroethane. Continuing the
investigations in this field, the authors dealt in the present
report with the influence of the concentration of the catalyst
on the further course of polycondensation. The influence of
the concentration of aluminumchloride on the course of common

Card 1/2

Synthesis of the Polyarylenalkyles. Communication 5: 62-58-5-11/27
 The Influence of the Concentration of the Catalyst on the Course of Common
 Polycondensation of Benzene and Chlorobenzene With 1,2-Dichloroethane

polycondensation of the 1,2-dichloroethane with benzene and chlorobenzene was investigated. It was found that the chlorine-content in the copolymer increases according to the prolongation of the reaction period. This confirms the already previously found heterogeneity of the relative activity of benzene and chlorobenzene in the interaction with dichloroethane. Further, the influence of the change of the reaction-temperature according to the change of concentration of the catalyst on the course of common polycondensation of dichloroethane was compared with that of benzene in the presence of aluminumchloride. There are 5 figures, 4 tables and 4 references, 3 of which are Soviet.

ASSOCIATION: Institut elementoorganicheskikh soedineniy Akademii nauk SSSR
 (Institute for Elemental-organic Compounds AS USSR)

SUBMITTED: November 1, 1956

Card 2/2

1. Cyclic compounds--Synthesis 2. Aluminum chlorides--Catalytic properties 3. Benzenes--Condensation reactions 4. Chlorobenzene--Condensation reactions 5. Dichloroethane--Condensation reactions

62-58-5-12/27

AUTHORS: Kolesnikov, G. S., Korshak, V. V., Suprun, A. P.

TITLE: Synthesis of the Polyarylenalkyles (Sintez poliarilenalkilov)
Communication 6: Influence of the Correlation of Initial Components on the Course of Process of the Common Polycondensation of Benzene and Chlorobenzene With 1,2-Dichloroethane(Soobshcheniye 6. Vliyaniye sootnosheniya iskhodnykh komponentov na tekhnicheskuyu protsessu sovmestnoy polikondensatsii benzola i khlorobenzola s 1,2-dikhlorethanom)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Otdeleniye Khimicheskikh Nauk, 1958, Nr 5, pp. 605 - 613 (USSR)

ABSTRACT: In previous works the influence of the reaction-temperature and of the concentration of the catalyst on the course of the common polycondensation of benzene and chlorobenzene with 1,2-dichloroethane in the presence of aluminumchloride was discussed (References 1,2). The investigation described in the present report, served for the purpose of determining the influence of the correlation of the components in the mixture of

Card 1/3

62-58-5-12/27

Synthesis of the Polyarylenalkyles. Communication 6: Influence of the Correlation of Initial Components on the Course of Process of the Common Polycondensation of Benzene and Chlorobenzene With 1,2-Dichloroethane

reactions- (in first place of the aromatic hydrocarbons). The applied method of performance was the same as that applied in the previous test. It results from tables 1 and 2 and from diagram 1 that with divided polycondensation of the benzene-dichloroethane-and chlorobenzene-dichloroethane-systems, the velocity of this process is substantially higher in the case of the polycondensation of chlorobenzene with dichloroethane. The coefficient of polymerization of the polycondensation-product of benzene with dichloroethane is higher than the coefficient of polymerization of the polymer (obtained from chlorobenzene and dichloroethane). The extent of the relative activity of chlorobenzene was determined (in which case the activity of benzene was assumed to be "1"). It was shown that the activity of these aromatic hydrocarbons does not depend on their concentration in the initial mixture. Moreover, an empiric equation was found which combines the structure

Card 2/3

Synthesis of the Polyarylenalkyles. Communication 6: Influence of the
Correlation of Initial Components on the Course of Process of the Common
Polycondensation of Benzene and Chlorobenzene With 1,2-Dichloroethane

62-58-5-12/27

of the copolymer (with its yield) with the correlation of the
aromatic hydrocarbons in the initial mixture. An increase
in the concentration of dichloroethane in the mixture of
reaction causes a corresponding reduction of the yield of
the copolymer. There are 5 figures, 10 tables and 5 references,
4 of which are Soviet.

INSTITUTION: Institut elementarnykh soedineniy Akad. nauk SSSR
(Institute for Elemental-organic Chemistry AS USSR)

DATE: November 1, 1956

1. Cyclic compounds--Synthesis
2. Benzenes--Condensation reactions
3. Chlorobenzene--Condensation reactions
4. Dichloroethane--Con-
densation reactions
5. Aluminum chloride catalysts--Applications

Card 3/3

AUTHORS: Kolesnikov, G. S., Korshak, V. V., 62-58-6-18/37
Suprun, A. P.

TITLE: The Synthesis of Polyarylalloys (Sintez poliarilenalkilov)
Communication 7. Joint Polycondensation of the Systems Dichloro-
ethane-Benzene-Fluorobenzene and Dichloroethane-Chlorobenzene-
-Fluorobenzene (Soobshcheniye 7. Sovmestnaya polikondensatsiya
sistem dikhlor₂etan-benzol-ftorbenzol i dikhloretan-khlorbenzol-
-ftorbenzol)

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye khimicheskikh nauk,
1958, Nr 6, pp. 763 - 766 (USSR)

ABSTRACT: In the preceding papers the authors spoke about the results of
the investigation of the joint polycondensation of dichloroethane
with benzene and chlorobenzene. For the purpose of explaining
the behavior of other halide-substituted aromatic hydrocarbons in
the case of joint polycondensation with dichloroethane and
benzene the authors investigated the polycondensation of the
systems dichloroethane-benzene-fluorobenzene and dichloroethane-
-chlorobenzene-fluorobenzene in the presence of aluminum chlo-
ride. The relative activity of the fluorobenzene is much lower

Card 1/2

The Synthesis of Polyaryls. Communication 7. SOV 62-58-6-18/37
Joint Polycondensation of the Systems Dichloroethane-Benzene-Fluorobenzene
and Dichloroethane-Chlorobenzene-Fluorobenzene

than that of chlorobenzene. The polycondensation of fluoro-
benzene with dichloroethane was carried out for the first time
by two of the authors of this paper and Fedorova (Ref 4). There
are 3 figures, 3 tables, and 4 Soviet references.

ASSOCIATION: Institut elementoorganicheskikh soedineniy Akademii nauk SSSR
(Institute of Elemental-organic Compounds AS USSR)

SUBMITTED: November 12, 1956

1. Benzene-ethyl chloride systems---Chemical reactions
2. Condensation reactions
3. Aluminum chloride---Chemical effects

Card 2/2

AUTHORS: Krongauz, Ye. S., Suprun, A. P. (Moscow) SOV/14-27-9-2/5

TITLE: Brief Survey of the Publications on Isotactic Polymers
(Kratkiy obzor rabot po izotakticheskim polimeram)

PERIODICAL: Uspekhi khimii. 1958. Vol 27, Nr 9, pp 1056-1083 (USSR)

ABSTRACT: In the beginning the authors point out that in the course of the last decades the interest of chemists has been directed to the investigation of the polymerization of unsaturated hydrocarbons (and their derivatives). This was mainly because important products had to be produced for national economies. The production of various polymers is discussed, beginning with the production of new stereoregular polymers of the α -olefines by Shil'dknekt and Natt. In the USSR the production of stereoregular polymers was initiated by the publications of Topchiyev and Krentsel' (Refs 3,4). The different polymerization reactions, especially the stereospecific ones, are discussed (Refs 28-36). In the next chapter the authors deal with the mechanism and the kinetics of the stereospecific polymerization (Refs 37,39). In this special chapter the isotactic polypropylene is discussed. In industrial practice those plastics are of especial interest which are made of products es-

Card 1/2

SOV/74-27-9-2/5

Brief Survey of the Publications on Isotactic Polymers

pecially rich in isotactic polymers. Recently the so-called fractionation method has been employed (to produce pure isotactic polymers); this has been done by direct polymerization (Refs 44-46). The authors then deal in detail with the block polymers (Refs 44-49) as well as with the stereoisomeric polymers of diolefines (Refs 20,44,50-54). The polyvinyl chloride produced by means of radical polymerization, the isotactic polybutene, and isotactic polystyrene are then discussed briefly. The synthesis and the properties of well crystallized α -olefines with ramified chain are dealt with in a special chapter. Finally the authors discuss the polymerization of acetylene, and the copolymers of the α -olefines (Refs 61,62,64). There are 20 figures, 12 tables, and 64 references, 12 of which are Soviet.

Card 2/2

KOLESNIKOV, G.S.; SUPRUN, A.P.; SOBOLEVA, T.A.

Carbon chain polymers and copolymers. Part 14: Copolymerization of ethylene with unsaturated compounds in the presence of boron alkyl compounds. Vysokom.sped. 1 no.4:627-634 Ap '59.
(MIRA 12:9)

1. Institut elementoorganicheskikh soedineniy AN SSSR.
(Boron compounds) (Ethylene) (Polymerization)

81567

S/190/60/002/03/11/011
B020/B066

5.383/
AUTHORS:

Kolesnikov, G. S., Suprun, A. P., Soboleva, T. A.,
Plate, A. F., Slonimskiy, G. L., Pryanishnikova, M. A.,
Tarasova, G. A.

TITLE:

Polymers and Copolymers¹ With Carbon Chains. XXI. Copolymers
on the Basis of Bicyclo (2,2,1) Heptadiene-2,5 and
1,2,3,4,7,7-Hexachloro Bicyclo (2,2,1) Heptadiene-2,5

PERIODICAL:

Vysokomolekulyarnyye soyedineniya, 1960, Vol. 2, No. 3,
pp. 451-455

TEXT: The authors attempted the polymerization of dissolved bicyclo-
heptadiene and hexachloro bicycloheptadiene in the presence of BF_3 and
the polymerization of hexachloro bicycloheptadiene in the presence of
benzoyl peroxide, tert-butyl peroxide, azoisobutyric acid dinitrile,
tri-n-propyl boron, and TiCl_4 . Hexachloro bicycloheptadiene does not
form polymers (Ref. 4). Bicycloheptadiene (Ref. 5) forms polymers in
methylene chloride in the presence of BF_3 (at -70° , 4 hours) in a 75%
yield. The copolymerization of bicycloheptadiene with hexachloro

Card 1/A

81587

Polymers and Copolymers With Carbon Chains.
XXI. Copolymers on the Basis of Bicyclo
(2,2,1) Heptadiene-2,5 and 1,2,3,4,7,7-
-Hexachloro Bicyclo (2,2,1) Heptadiene-2,5

S/190/60/002/03/11/014
B020/B066

bicyclopentadiene and other monomers (styrene, vinyl acetate, methyl methacrylate) was studied to clarify the influence of the copolymer composition upon their solubility and thermodynamic properties. The authors synthesized copolymers from equimolecular quantities of dissolved bicycloheptadiene and hexachloro bicycloheptadiene in the presence of BF_3 (2 mole%) and in bulk in the presence of benzoyl peroxide and tri-n-propyl boron (0.5 mole%). The results obtained are given in Table 1. The curves of the thermodynamic properties of the copolymers of bicycloheptadiene and hexachloro bicycloheptadiene are presented in Fig. 1. According to an X-ray structural analysis, the resultant copolymers are amorphous. The properties of copolymers from equimolecular quantities of bicycloheptadiene and styrene are also given (Table 2). The results of the copolymerization of equimolecular quantities of bicycloheptadiene with methyl methacrylate in bulk in the presence of azoisobutyric acid dinitrile, benzoyl peroxide, and tert-butyl peroxide showed that the activity of methyl methacrylate

Card 2/4

Polymers and Copolymers With Carbon Chains.
XXI. Copolymers on the Basis of Bicyclo
(2,2,1) Heptadiene-2,5 and 1,2,3,4,7,7-
-Hexachloro Bicyclo (2,2,1) Heptadiene-2,5

81587
S/190/60/002/03/1/001
B020/B066

is much higher than that of bicycloheptadiene. The copolymers obtained contain a total of about 1 per cent of bicycloheptadiene links, which is not sufficient for an increase of the thermal stability of polymethyl methacrylate. The curves of the thermodynamic properties of the copolymers of bicycloheptadiene and styrene, as well as of bicycloheptadiene and vinyl acetate are given in Fig. 2. The latter copolymer was synthesized for the first time. The copolymers of bicycloheptadiene and hexachloro bicycloheptadiene with a molar ratio of 70.5 : 29.5 are well soluble in dichloro ethane and toluene, and are highly elastic at elevated temperatures (250 - 350°). The copolymer of bicycloheptadiene and vinyl acetate is also highly elastic in a wide temperature range (60 - 350°). There are 2 figures, 2 tables, and 6 references: 3 Soviet, 2 US, and 1 British. H

ASSOCIATION: Institut elementoorganicheskikh soedineniy (Institute of
Elemental-organic Compounds). Institut organicheskoy khimii
im. N. D. Zelinskogo AN SSSR (Institute of Organic

Card 3/4

KOLESHNIKOV, G.S.; SUPRUN, A.P.; SOBOLEVA, T.A.; YERSHOVA, V.A.

Carbochain polymers and copolymers. Part 26: Polymerization
and copolymerization of 1,1,2-trichloro-1,3-butadiene.
Vysokom. soed. 2 no.8:1266-1269 Ag '60. (MIRA 13:9)

1. Institut elementoorganicheskikh soedineniy AN SSSR.
(Butadiene) (Polymerization)

KRISHEVSKIY, M.; PALCHINSKIY, B.; SUPRUN, A.P. [translator]

Viscosimetry of polymer solutions. Part 1: Capillary viscometer
with electronic recording of flow time. Vysokom.soed. 3 no.6:936-
942 Je '61. (MIRA 14:6)

1. Politekhnicheskiy institut, Lodz'.
(Viscosimeter) (Polymers)

37442

S/190/62/004/005/019/026
B110/B108

15.7.62
AUTHORS:

Kolesnikov, G. S., Suprun, A. P., Soboleva, T. A., Yershova, V. A., Bondarev, V. B.

TITLE:

Carbochain polymers and copolymers. XXXIX. Copolymerization of 1,1,2-trichlorobuta-1,3-diene with other unsaturated compounds

PERIODICAL:

Vysokomolekulyarnyye soyedineniya, v. 4, no. 5, 1962, 743-748

TEXT: Determinations were made of the relative activities of 1,1,2-trichlorobuta-1,3-diene and styrene (10:90; 25:75; 50:50; 75:25; and 90:10) and of the composition of their copolymers at low degrees of conversion (5 - 7%). On the basis of the relative activities $r_1 = 0.07 \pm 0.03$ (styrene) and $r_2 = 1.18 \pm 0.08$ (trichlorobutadiene), the composition of the copolymer was plotted versus the composition of the monomer mixture. In order to raise the softening point ($\sim 50^\circ\text{C}$) of polytrichlorobutadiene, 1,1,2-tri-

Card 1/3

S/190/62/004/005/019/026
B110/B108

Carbochain polymers and copolymers...

chlorobuta-1,3-diene was copolymerized with acrylonitrile, vinyl chloride, and bicyclo-(2,2,1)-hepta-2,5-diene. During bulk copolymerization with acrylonitrile at a ratio of 50:50, only 10 mole% of acrylonitrile radicals was added to the copolymer. Thereupon, copolymerization was also carried out in a water-oil emulsion (1.8:1) with mersolate as an emulsifier, and benzoyl peroxide and ammonium persulfate as initiators. With the use of ammonium persulfate, only trichlorobutadiene homopolymers could be obtained from mixtures of 10 - 80 mole% of trichlorobutadiene and benzoyl peroxide. With acrylonitrile radicals of less than 40 mole%, the copolymer was completely soluble in toluene, while with more than 40 mole%, it was only partially soluble. Extraction of a partially soluble copolymer with toluene gave two fractions: (1) 88% by weight of a white, powder, soluble in toluene and containing 39 mole% of acrylonitrile radicals; (2) a yellow powder, soluble only in dimethyl formamide and containing 65 mole% of acrylonitrile radicals. Either powder possessed a low softening point, but their thermomechanical curves differed considerably. The copolymerization of 1,1,2-trichlorobuta-1,3-diene with vinyl chloride was also carried out in an emulsion, whereby solid lumps and lattices were obtained at the

Card 2/3

Carbochain polymers and copolymers ...

S/190/62/004/005/019/026
B110/B108

same time. Their softening point is 50°C. The copolymerization of 1,1,2-trichlorobuta-1,3-diene with bicyclo-(2,2,1)-hepta-2,5-diene was carried out both in bulk and emulsion. Bulk polymerization was done with .1 mole% of benzoyl peroxide. Polymerization in emulsion lasted 15 hrs at room temperature and, in addition, 10 hrs at 50°C, resulting in light-yellow to dark-brown polymers. At a ratio of 36.5 mole% of trichlorobutadiene to 63.5 mole% of bicycloheptadiene, the softening point of this copolymer was 130 - 140°C. It was soluble in toluene and dichloroethane. There are 2 figures and 5 tables.

ASSOCIATION: Institut elementoorganicheskikh soedineniy AN SSSR
(Institute of Elemental Organic Compounds AS USSR)

SUBMITTED: April 17, 1961

Card 3/3

S/190/63/005/004/003/020
B101/B220

AUTHORS: Soboleva, T. A., Suprun, A. P., Kolesnikov, G. S.

TITLE: Carbochain polymers and copolymers. XLIV. Study of the effect of various factors on the polymerization of 1,1,2-trichloro-1,3-butadiene

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 5, no. 4, 1963, 487-491

TEXT: The effects of the nature and concentration of the initiator, the temperature and the reaction time were studied as to yield and molecular weight of the polymer obtained by mass polymerization of 1,1,2-trichloro-1,3-butadiene. Results: (1) At 80°C and with a reaction time of 230 min and an initiator concentration of 0.5 mole-% the following yields (%) and intrinsic viscosities in benzene at 25°C (dl/g) were obtained: with benzoyl peroxide 88.5, 0.39; with azoisobutyric dinitrile 75.5, 0.30; with tert-butyl peroxide 28.5, 0.19; with cumene hydroperoxide 29.5, 0.30; with tri-n-propyl boron 24.0, 0.17; and without initiator 21.5, 0.33. (2) The effect of the initiator concentration was investigated using benzoyl peroxide at 80°C and 230 min reaction times. The initiator concentrations (mole-%), yields (%) and intrinsic viscosities (dl/g) are given: 0.1, 45.5, Card 1/2

Carbochain polymers and ...

S/190/63/005/004/003/020
B101/B220

0.23; 0.5, 88.5, 0.39; 1.5, 99.5, 0.20. (3) The polymer yield with 0.5 mole% benzoyl peroxide and 230 min reaction time increases from 1 % at 25°C to 96 % at 100°C. (4) Under equal conditions the intrinsic viscosity was ~0.5 at 25°C and ~0.1 at 40°C. (5) With 0.5 mole% benzoyl peroxide at 80°C the polymer yield was 30 % after 60 min and almost 100 % after 300 min reaction time. The intrinsic viscosity increased rapidly during the first 60 min but thereafter very slowly. (6) The following optimum values are given: 0.5 % benzoyl peroxide, 80°C, 360 min. The properties of the polymer thus obtained are: yield 99.9 %; intrinsic viscosity 0.43 dl/g; m.w. 71,000; specific weight 1.44; softening point +50°C. (7) It is evident from the IR spectrum of 1,1,2-trichloro-1,3-butadiene and its polymer that the polymer has a considerable number of CH₂ and CH groups at the double bond; this makes a further study of the mechanism of this reaction desirable. There are 4 figures and 3 tables.

ASSOCIATION: Institut elementoorganicheskikh soedineniy AN SSSR (Institute of Elemental Organic Compounds of AS USSR)

SUBMITTED: September 9, 1961
Card 2/2

ACCESSION NR: AT4020704

S/0000/63/000/000/0128/0130

AUTHOR: Suprun, A. P.; Soboleva, T. A.; Lopatina, G. P.

TITLE: Polymerization and copolymerization of 3,3,3-trichloropropene

SOURCE: Karbotsepny*ye vy*sokomolekulyarny*ye soyedineniya (Carbon-chain macromolecular compounds); sbornik statey. Moscow, Izd-vo AN SSSR, 1963, 128-130

TOPIC TAGS: block polymerization, copolymerization, trichloropropene, polytrichloropropene, methyl methacrylate, benzoyl peroxide, vinyl acetate, styrene, acrylonitrile

ABSTRACT: The effect of temperature and reaction time on the block polymerization of 3,3,3-trichloropropene was investigated and the thermomechanical properties of the polymer were studied. Copolymers of 3,3,3-trichloropropene with methyl methacrylate, vinyl acetate, styrene and acrylonitrile were also obtained by block polymerization. The reaction was carried out with 0.5 mol.% benzoyl peroxide under the influence of x-irradiation at different temperatures, the maximum yield being obtained at 70C. At 100C, the yield decreased. The experimental data are tabulated. "The authors would like to thank B. L. Tsetlin for carrying out the radiation polymerization." Orig. art. has: 1 figure and 2 tables.

Card 1/2

1. 1963/01/01 8/0190/63/005/005/0639/0643 7/ RM/WW
 ACCESSION NR: AP3000606

AUTHOR: Soboleva, T. A.; Suprun, A. P.; Kolesnikov, G. S. 70

TITLE: Carbon-chain polymers and copolymers. 46. The influence of various factors on the emulsion polymerization of 1,1,2-trichlorobuta-1,3-diene 1

SOURCE: Vy*skomolekulyarny*ye soyedineniya, v. 5, no. 5, 1963, 639-643

TOPIC TAGS: carbon-chain polymers, emulsion polymerization, trichlorobutadiene, initiator, emulsifier

ABSTRACT: The present work is a continuation of an earlier investigation by the authors, with the difference that there the 1,1,2-trichlorobuta-1,3-diene was in bulk. In the present work a study was made of the ratio of phases, nature, and concentration of initiator, reaction temperature, reaction time, and emulsifier concentration in relation to the yields and molecular weights of the resultant polymers. The experiments were conducted in sealed, evacuated ampules. A maximum yield of polytrichlorobutadiene was obtained at a ratio of the aqueous to the oily phase of 1.8/1, with a concentration of the initiator (potassium persulfate) of 0.17 Mol%, at a temperature of 50C, a reaction time of approximately 5 hours, and with 1% of the emulsifier used. Under the above optimal conditions for the initiator, phase ratio, and temperature, and with an almost double concentration of

Card 1/32

L 1961 12

ACCESSION NR: AP3000686

emulsifier and reaction time, a polytrichlorobutadiene of 3,400,000 molecular weight was obtained, as against the figure of 70,000 for the earlier work where the process of polymerization was conducted on bulk material. Orig. art. has: 3 tables and 3 figures.

ASSOCIATION: Institut elementoorganicheskikh soedineniy AN SSSR (Institute of Organoelemental Compounds, Academy of Sciences SSSR)

SUBMITTED: 04 Oct 61

DATE ACQ: 17 Jun 63

ENCL: 01

SUB CODE: CH

NO REF SOV: 003

OTHER: 000

Card 2/32

SUPRUN, A.P., kand.tekhn.nauk, inzhener-kontr-admiral

Communication systems using artificial earth satellites. Mer. sbor.
46 no.5:56-64 My 63. (MIRA 17:1)

SOPOLEVA, T.A.; SUPRUN, A.P.; PAVLOVA, S.A.

Polydispersity of polymers of 1,1,2-trichloro-1,3-butadiene.
Vysokom. soed. 6 no.1:89-91 Ja'64. (MIRA 17:5)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

FAVIOVA, S.A.; SOBOLEVA, T.A.; SUPRUN, A.P.

Viscosity and molecular weight of polytrichlorobutadiene.
Vyskom. soed. 6 no.1:122-124 Ja'64. (MIRA 17:5)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

SUPRUN, A.P.; SOBOLEVA, T.A.; LOPATINA, G.P.

Polymerization of 3,3,3-trichloropropene under pressure. Vysokom.
sred. 6 no.4:726-728 Ap '62. (MIRA 17:6)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

GREBENSHCHIKOV, L.S.; SHKURATOV, O.G.; GIKAL, N.K.; SUPRUN, A.P.

The EPM-50 mine electrostatic precipitator. Gor. zhur.
no.5:64-67 My '64. (MIRA 17:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut tsvetnoy
metallurgii.

ACCESSION NR: AP4032573

S/0190/64/006/004/0726/0728

AUTHORS: Suprun, A. P.; Soboleva, T. A.; Lopatina, G. P.

TITLE: Polymerization of 3,3,3-trichloropropene under pressure

SOURCE: Vyssokomolek. soedin., v. 6, no. 4, 1964, 726-728

TOPIC TAGS: methyl ethylene, propene, trichloropropene, trichloropropene polymerization, pressure polymerization, benzoyl peroxide initiator, radical polymerization mechanism, polytrichloropropene, polytrichloropropene thermo-mechanical property

ABSTRACT: Polymerization of 3,3,3-trichloropropene was conducted in special lead ampules placed in a high-pressure reactor. It was found that in the presence of 0.6 mole/% of benzoyl peroxide as initiator and at a temperature of 50C a yield of polytrichloropropene of 5, 19, and 31% respectively was obtained after 6 hours under 3000, 6000, and 7000 atmospheres. Without initiator, the yield of the polymer under 6000 atm at 50C and after 12 hours was only 1%. In the presence of 1 and 3 mole/% of the initiator it reached 50 and 75% respectively. The polymer was soluble in benzene, toluene, xylene, nitrobenzene, chloroform, carbon tetrachloride,

Card 1/2

ACCESSION NR: AP4032573

trichloroethylene and anisole. It had a molecular weight of 3500, an amorphous structure with small crystalline inclusions, and a softening point at 50C. The authors state that in the presence of benzoyl peroxide (without pressure application) the molecular weight of the resulting polytrichloropropene averages 1200, with 15% of it as high as 16 000. The high-molecular fraction differs in solubility and other properties from the main mass. Trichloropropene does not polymerize under normal pressure in the presence of 0.6 mole/% of initiator. Orig. art. has: 2 tables and 2 charts.

ASSOCIATION: Institut elementoorganicheskikh soedineniy AN SSSR (Institute of Organoelemental Compounds, AN SSSR)

SUBMITTED: 24May63

DATE ACQ: 11May64

ENCL: 00

SUB CODE: CH

NO REF SOV: 002

OTHER: 000

Card 2/2

L 41150-65 EWG(j)/EPA(s)-2/ENT(m)/EPF(o)/EPR/ENP(j)/T/EWA(h)/EWA(l) Pc-4/
Pr-4/Ps-4/Pt-10/PeB RPL WM/GS/RM
ACCESSION NR: AT5002110 S/0000/64/000/000/0042/0045

AUTHOR: Freydlina, R. Kh.; Kolesnikov, G. S.; Slonimskiy, G. L.; Suprun, A. P.;
Soboleva, T. A.; Belyavskiy, A. B.; Yershova, V. A.

TITLE: New chlorinated monomers for the synthesis of noncombustible polymers

SOURCE: AN SSSR. Institut neftekhimicheskogo sinteza. Sintez i svoystva monomerov
(The synthesis and properties of monomers). Moscow, Izd-vo Nauka, 1964, 42-45

TOPIC TAGS: fire resistant polymer, polymer mechanical property, chlorinated polymer,
olefin polymerization, telomerization, dehydrohalogenation, radiation polymeriza-
tion

ABSTRACT: 3,3,3-Trichloropropene and 1,1,2-trichloro-1,3-butadiene, which have been
previously prepared by published studies, were prepared by a two step reaction and their
polymerization was studied in an effort to obtain noncombustible polymers.
3,3,3-Trichloropropene was synthesized via 1,1,1,3-tetrachloropropane by telomerization
the one with 1,2-dichloroethane (see also AN SSSR, 2529-1948) and dehydro-
halogenation of the product. The latter was then dissolved in a solvent to give a
solution of 1,1,1-trichloropropene and 1,1,2-trichloro-1,3-butadiene as a by product. The latter

Card 1/3

L 41150-65

ACCESSION NR: AT5002110

0

ASSOCIATION: None

SUBMITTED: 30Jul64

ENCL: 00

SUB CODE: OC, G C

NO REF SOV: 007

OTHER: 003

Cord

f30
3/8

"APPROVED FOR RELEASE: 08/26/2000

CIA-RDP86-00513R001653920012-2

APPROVED FOR RELEASE: 08/26/2000

CIA-RDP86-00513R001653920012-2"

KHITUNOVA, A.V.; KORNILIK, V.V.; GORUN, A.P.

Polymerization and copolymerization of 3,3-dichloro-1-propene. Izv. AN
SSSR, Ser. khim. no.7:1264-1266 '65. (MIRA 18:7)

1. Institut elementoorganicheskikh soedineniy AN SSSR.

SUPRUN, A. S.

Suprun, A. S. and Khoroshev, I. I. - "Methods of reducing the consumption of coke and the content of carbon in the cupola melting of malleable cast iron", Trudy Rost. n/D in-ta s. -kh. mashinostroyeniya, Issue 4, 1948, p. 107-09.

SO: U-411, 17 July 53, (Letopis 'Zhurnal 'nykh Statey, No. 20, 1949).

SUPRUN, A.S.

Effect of sulfur on the mechanical properties of modified malleable
cast iron. Lit. proizv. no.1:13-14 Ja '59. (MIRA 12:1)
(Cast iron--Testing) (Sulfur)

SUPRUN, A.V.

Role of Narzan baths in the compound treatment of primary
glaucoma. Vest.oft. no.4:19-22 '62. (MIRA 15:11)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut glaznykh
bolezney imeni Gel'mgol'tsa i glaznoye otdeleniye sanatoriya
"Piket" kurorta Kislovodsk (nauchnyy rukovoditel' - prof. N.M.
Pavlov).

(GLAUCOMA) (MINERAL WATERS)

SUPRUN, A.V.

Sanatorium and health-resort treatment of patients with primary glaucoma. Uch.zap. GMI glaz.bol. no.8: 228-238'63.
(MIRA 16:9)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut glaznykh bolezney imeni Gel'mgol'tsa.
(GLAUCOMA) (SANATORIUMS)
(HEALTH RESORTS, WATERING-PLACES, ETC.)

SUPRUN, A.V.

Results of sanatorium and health-resort treatment of patients
with primary glaucoma. Uch.zap. GNII glaz.bol. no.8:239-243'63.
(MIRA 16:9)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut glaznykh
bolezney imeni Gel'mgol'tsa.
(GLAUCOMA) (KISLOVODSK--SANATORIUMS)
(KISLOVODSK--HEALTH RESORTS, WATERING-PLACES, ETC.)

PLANE I BOOK EXPIRATION 307/333

Pravda, Universitet. Nauchnoye studentcheskoye obshchestvo
 Zhurnal nauchnykh rabot studentov, Yp. 2 (Collection of Sci-
 entific Works of Students, No. 2) Pravda, 1959. 99 p. 500
 copies printed.

Sponsoring Agency: Elitizakly Gosudarstvennyy universitet.
 Nauchnoye studentcheskoye obshchestvo.

Resp. Ed.: L. A. Spokorov, Docent; Tech. Ed.: N. A. Yefimov,
 scientists, and philologists.

PREREQUISITE: This book is intended for mathematicians, natural
 scientists, and philologists.

CONTENTS: The collection of articles contains studies in mathe-
 matics and sciences, physics, biology, and philology written
 by students of the Nauchnoye studentcheskoye obshchestvo
 (Students' Scientific Association) of the Elitizakly Gosudarstvennyy
 universitet (Elitiz State University) under the guidance of
 faculty members. References accompany each article.

INDEX

Ibragimov, A. (Fourth-Year Student of the Division of Biology-
 Scientific Adviser: A. I. Yarushevich, Doctor of Biological
 Sciences). On the winter zoological expedition in the
 Koshovskaya Valley 73

Moiseyev, O. A. (Fourth-Year Student of the Division of Biology-
 Scientific Adviser: V. O. Dolgovskiy, Doctor of Biological
 Sciences). Studying the forests of the Shumskaya Izhnya dacha (Dacha
 Woodland) 79

Dalakov, N. M. (Fourth-Year Student of the Division of Biology-
 Scientific Adviser: A. I. Yarushevich, Doctor of Biological
 Sciences). Studying weeds of Vegetable Crops at the Kolobov Izhni
 Logovno 81

PHILOLOGY

Gromov, V. (Second-Year Student of the Division of Philology-
 Scientific Adviser: A. I. Yarushevich, Doctor of Linguistic
 Sciences). On the problem of the Russian Language Press 85

Pravda, Universitet. Nauchnoye studentcheskoye obshchestvo
 Zhurnal nauchnykh rabot studentov, Yp. 2 (Collection of Sci-
 entific Works of Students, No. 2) Pravda, 1959. 99 p. 500
 copies printed. On the Problem of Central Asian
 Borrowings in the Russian Language 93

1.2.2.2.6.5 $\text{ENT}(j)/\text{ERC-2}/\text{EXP}(c)/\text{GWA}(h)/\text{EXP}(v)/\text{ERC-4}/\text{ERC}(t)/\text{T}/\text{EXP}(k)/\text{EXP}(h)/$

ACCESSION NR AM443710 BOOK EXPLOITATION

S/

1. Alexandr Petrovich, and Suprun, Boris Antonovich

•

in binary code information transmission
 Advanced Code-Marked Information Development
 Errata slip inserted. 5421 copies printed.

TOPIC TAGS: automation, correcting code, redundant coding,
information transmission

TABLE OF CONTENTS [abridged]:

Foreword -- 3

Ch. I. Codes and sets -- 5

Ch. II. General properties of uniform correcting codes -- 29

Ch. III. Group codes -- 49

Ch. III. Group codes -- 49
Ch. II. Cyclic group codes -- 82

Ch. V. Methods of building coding and decoding equipment for group
and cyclic group codes -- 128

Ch. VI. Recurrent methods of correcting errors -- 184

Card 1/2

L 45820-65

ACCESSION NR AM4043710

Ch. VII. Effectiveness of uniform correcting codes -- 204
Appendices -- 219
Bibliography -- 266

SUBMITTED: 05Mar64

SUB CODE: DP

NO REF SOV: 015

OTHER: 016

Card

¹²
2/2

SUPRUN, Fedor Kondrat'yevich; YEVSEYEV, V.I., tekhn. red.

[Theory and design of mechanisms] Teoriia i proektirovanie
mekhanizmov; konspekt lektsii. Leningrad, Leningr. elektro-
tekhn. in-t. Pt.1. 1962. 207 p. (MIRA 16:6)
(Mechanisms)

SUPRUN, F.K.

The LETI-62 diapositive projector. Biul.tekh.-ekon.inform.Gos.nauch.-
issl.inst.nauch.i tekh.inform. 17 no.1:50-52 '64. (MIRA 17:2)

LISTVIN, N.I., inzhener-podpolkovnik; SUPRUN, F.P., polkovnik.

At the Aeronautical Exhibition in Farnborough. *Ust.Vozd.Fl.* 39
no.11:89-96 '56. (MLRA 10:3)
(Farnborough, Great Britain--Aeronautics--Exhibitions)

SUPRUN, P.F.; SHILOV, K.V.; BLAGONRAVOV, A.A., akademik, red.;
SMIRNOV, Ye.A., red.; BORISOV, V.V., red.; BERDNIKOVA,
N.D., red.-leksikograf; KUZ'MIN, I.F., tekhn. red.

[English-Russian astronautics dictionary] Anglo-russkii
slovar' po kosmonavtike. Moskva, Voenizdat, 1964. 304 p.
(MIRA 17:2)

~~SUPRUN, G.~~

Understand thoroughly the essence of trade union work. Okhr.
truda i sots.strakh. no.2:22-26 Fe '59. (MIRA 12:4)

1. Sekretar' Kaluzhskogo obkoma Kommunisticheskoy Partii
Sovetskogo Soyuza.
(Kaluga--Industrial hygiene)

SUPRUN, G.F., kand. tekhn. nauk

Frequency changes in marine synchronous generators caused by load
switching. Sudostroenie 25 no.4:32-35 Ap '59. (MIRA 12:6)
(Electric generators) (Electricity on ships)

TRESHCHEV, Ivan Il'ich; SUFRUN, G.F., doktor tekhn. nauk,
retsenzent; SMIRNOV, V.A., kand. tekhn. nauk, nauchn.
red.; KOZENGAUZ, N.M., red.

[Asymmetrical operating modes of a.c. machines of ships]
Nesimmetrichnye rezhimy sudovykh mashin peremennogo toka.
Leningrad, Sudostroenie, 1965. 247 p. (MIRA 18:5)

KONSTANTINOV, Vasilii Nikolayevich: VILESOV, D.V., doktor tekhn.
nauk prof., retsenzent; KUZNETSOV, N.A., Laureat Gos.
premi, retsenzent; SUPRUN, G.F., doktor tekhn.nauk
nauchn. red.; CHFAS, M.A., red.

[Synchronization of marine synchronous generators] Sin-
khronizatsiia sudovykh sinkhronnykh generatorov. Lenin-
grad, Sudostroenie, 1965. 289 p. (MIRA 19:1)

ADPRUN, G.S.

Efficient application of modern methods of erecting sheet metal structures. Avtom. svist. 18 no.4.64-69 Ap '65. (MIRA 18:6)

1. Institut Elektrosvarki Spets. Litov. AN URSR.

SUPRUN, I.; APOSTOLI, B.

Why Leningrad ship model builders are so successful. Voen.
snan. 36 no.7:31, J1 '60 (MIRA 13:7)

1. Instruktor gorodskogo komiteta Dobrovol'nogo obshchestva
sodeystviya armii, aviatsii i flotu, Leningrad (for Suprun).
2. Predsedatel' gorodskoy sektiis morskogo modelizma, Leningrad
(for Apostoli).
(Leningrad--Ship models)

Preventing losses in steel wire production Moskva, Gos nauchno-tekhn. izd-vo lit-ry po
cherno i tsvetnoi metallurgii, 1962. 27 p. (Peredovye metody truda) (54-22438)

TS270.S87

SUPRA, I. I.

Verlustbekämpfung Bei Der Stahldrah-herstellung. Leipzig, Fachbuchverlag, 1954.

21 P. illus., Diagr., Tables.

Translation From The Russian, Bor'ba S Poteryami V Staloprovolotnom Proizvodstve, 1952.

SO: M/5

733.96

.S9

STARSHINOV, B.N., kand.tekhn.nauk, SAVELOV, N.I., inzh., TARASOV, D.A.,
inzh., SUPRUN, I.Ye., inzh., GORBANEV, Ya.S., inzh., PLISKANOVSKIY,
S.T., inzh.

Adopting a blast furnace with a useful capacity of 1719 m³.
Metallurg 5 no.7:7-9 J1 '60. (MIRA13:7)
(Blast furnaces)

STARSHINOV, B.N., kand.tekhn.nauk; LEBEDEV, A.Ye., kand.tekhn.nauk;
LUKASHOV, G.G., inzh.; SAVELOV, N.I., inzh.; TARASOV, D.A., inzh.;
SUPRUN, I.Ye., inzh.; TIKHOMIROV, Ye.N., inzh.; SINITSKIY, V.D.,
inzh.; GORBANEV, Ya.S., inzh.; PRIKHODKO, L.D., inzh.

Operation of a blast furnace with a capacity of 1513 m³. Biul.
TSIICHM no.9:1.6 '60. (MIRA 15:4)
(Blast furnaces)